# Before The FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

| In the Matter of  )  Amendment of Section 73.622(b)  Docket No.  DTV Table of Television Allotments  (Clarksdale, Mississippi) |                                                                      | ET FILE COPY ORIGINAL           | MAY                                   |
|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------|---------------------------------------|
|                                                                                                                                | Amendment of Section 73.622(b)<br>DTV Table of Television Allotments | )<br>)<br>) Docket No<br>)<br>) | MAY 01 2000  PROBLEM OF THE SECRETARY |

To: Chief, Allocations Branch

#### **PETITION FOR RULE MAKING**

The Mississippi Authority for Educational television ("MAET"), through its attorneys, hereby petitions, pursuant to Section 73.622(a) of the FCC's rules, for amendment of Section 73.622(B), the DTV Table of Television Allotments, to allot DTV Channel \*26 for noncommercial educational use as the paired channel for existing NTSC Channel \*21 at Clarksdale, Mississippi. In support thereof, the following is respectfully shown:

1. MAET is an applicant for a new public television station on NTSC Channel \*21 at Clarksdale, Mississippi (FCC File No. BPET-960919KK). Inasmuch as this application was filed shortly after the Commission's "freeze" on certain new NTSC applications, no corresponding DTV channel was paired with Channel \*21, Clarksdale, in the Commission's Sixth Report and Order. On December 17, 1999, MAET filed its notification of intent to maximize DTV facilities in connection with this NTSC allotment. MAET is committed to activating facilities, including DTV facilities, to serve the Clarksdale area. The instant proposal follows extensive review by MAET of DTV potentialities throughout the State of Mississippi. Attached hereto is an engineering statement which confirms that MAET's proposed station can operate on DTV Channel \*26 using an omni-directional antenna with an effective ERP of 10.0 kW at 94 meters

No. of Copies rec'd 0 + 4 List ABCDE MMB AAT without causing above <u>de minimis</u> interference to any of the applicable surrounding stations.

- 2. For the foregoing reasons, and for all of the reasons set forth in the attached engineering statement, MAET submits that the public interest, convenience and necessity will be amply served by expeditious and favorable consideration of this petition for rule making. Such action by the FCC will allow MAET to construct and operate DTV facilities to serve Clarksdale, Mississippi and its environs. As shown in the attached engineering statement, this DTV reserved allocation can be implemented in a manner that is fair, efficient and without adverse impact upon area NTSC and DTV authorizations and allotments.
- 3. Accordingly, MAET respectfully urges the FCC to issue forthwith a Notice of Proposed Rule Making to allot DTV Channel \*26 at Clarksdale, Mississippi.

Respectfully submitted,

MISSISSIPPI AUTHORITY FOR EDUCATIONAL TELEVISION

By: Wellot G. Stevenson

SCHWARTZ, WOODS & MILLER 1350 Connecticut Avenue, N.W. Suite 300 Washington, D.C. 20036-1717 202/833-1700

Its Attorneys May 1, 2000 APPLICATION FOR CONSTRUCTION
PERMIT TELEVISION BROADCAST
STATION DTV CHANNEL 26, ERP 10 kW
AT 94 METERS ABOVE AVERAGE
TERRAIN MISSISSIPPI AUTHORITY FOR
EDUCATIONAL TELEVISION
CLARKSDALE, MISSISSIPPI



| SE                                                                                               | стю                     | N V-D - DTV BROADCAST ENGINEERING DA                                                                                                                                                                                                                                          | TA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | File N                          | Referral Date                                                               | NLY      |             |        |
|--------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------|----------|-------------|--------|
| Name of Applicant Call Letters (if issued)  MISSISSIPPI AUTHORITY FOR EDUCATIONAL TELEVISION N/A |                         |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | )                                                                           |          |             |        |
|                                                                                                  | _                       | Questions 1-5 of the Certification Checklist and plin Items 1-22, below. If an item is not applicable, or                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | and in                          | formation for the prop                                                      | osed     | facility    | y, as  |
| COI                                                                                              | nstructi                | tion Checklist: A correct answer of "Yes" to all on permit. An answer of "No" will require addition permit can be granted.                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                                                             |          |             |        |
| 1.                                                                                               | The                     | proposed DTV facility complies with 47 C.F.R. Sect                                                                                                                                                                                                                            | ion 73.622 in th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | e follov                        | wing respects:                                                              |          |             |        |
|                                                                                                  | (a)                     | It will operate on the DTV channel for this station                                                                                                                                                                                                                           | ı as established i                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | n 47 C.                         | F.R. Section 73.622.                                                        |          | Yes         | ✓ No   |
|                                                                                                  | (b)                     | It will operate from a transmitting antenna loca reference site for this station as established in 47 C                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | 1 miles) of the DTV                                                         |          | Yes         | ₩ No   |
|                                                                                                  | (c)                     | It will operate with an effective radiated power terrain (HAAT) that do not exceed the DTV reestablished in 47 C.F.R. Section 73.622.                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                                                             |          | Yes         | ₩ No   |
| 2.                                                                                               | or th                   | proposed facility will not have a significant environr<br>e general public to levels of RF radiation exceeding<br>therefore will not come within 47 C.F.R. Section 1.13                                                                                                       | the applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                 |                                                                             |          | Yes         | □ No   |
| 3.                                                                                               |                         | uant to 47 C.F.R. Section 73.625, the DTV cove mpass the allotted principal community.                                                                                                                                                                                        | rage contour o                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | f the p                         | proposed facility will                                                      | <b>V</b> | Yes         | ∐ No   |
| 4.                                                                                               | radio                   | requirements of 47 C.F.R. Section 73.1030 regarding receiving installations and FCC monitoring stat cable.                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | -                                                                           | V        | Yes         | □ No   |
| 5.                                                                                               | requi<br>prope<br>later | antenna structure to be used by this facility has been are reregistration to support the proposed antenna, OF osed structure will not adversely effect safety in air registration under the Commission's phased registratructure does not require notification to the FAA pur | the FAA has port of the real than the real t | reviousl<br>d this s<br>the pro | ly determined that the<br>structure qualifies for<br>sposed installation on | V        | Yes         | □ No   |
| Ap                                                                                               | plication               | on Data:                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | (Fig. 11)                                                                   | <u> </u> |             |        |
| 1.                                                                                               | Chann                   |                                                                                                                                                                                                                                                                               | 2. Principal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | commu                           | nity to be served:                                                          |          |             |        |
|                                                                                                  |                         | DTV Channel No. 26  Associated analog TV station channel no., if any 21                                                                                                                                                                                                       | City or Town                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                 |                                                                             |          | State<br>MS |        |
| 3.                                                                                               | Effec                   | ctive radiated power (average power): (in the main la                                                                                                                                                                                                                         | be of radiation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | if direc                        | etional)                                                                    |          | 10          | kw     |
| 1                                                                                                |                         | ht of antenna radiation center above average terrain (                                                                                                                                                                                                                        | •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | •                               |                                                                             |          | 94          | meters |

#### Section V-D -D TV BROADCAST ENGINEERING DATA (Page 2)

| 5.     | Pur          | pose of Application: (check appropriate boxes)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                     |                                  |                                              |                          |                           |        |
|--------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------|----------------------------------------------|--------------------------|---------------------------|--------|
| •      | ] (          | Construct a new (main) facility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                     | Construct                        | t a new auxilia                              | ry facility              |                           |        |
|        | ] ,          | Modify construction permit for main facility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Modify c                         | onstruction pe                               | rmit for aux             | liary antenna             |        |
|        | ] ,          | Modify licensed main facility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Modify li                        | censed auxilia                               | ry antenna               |                           |        |
|        | -            | e is to modify, indicate the nature of change(s) by c tions affected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | hecking ap                          | oropriate bo                     | ox(es) and spec                              | cify the file r          | number(s) of th           | e      |
|        | ] ,          | Antenna supporting structure height                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     | Effective                        | radiated power                               | r                        |                           |        |
|        | ] ,          | Antenna height above average terrain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Channel                          |                                              |                          |                           |        |
|        | ] ,          | Antenna location                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                     | Antenna s                        | system                                       |                          |                           |        |
|        | ] (          | Other (summarize)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                     |                                  |                                              |                          |                           |        |
| Fi     | le N         | Jumber(s) ————————————————————————————————————                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ·                                   |                                  |                                              |                          |                           |        |
| (      | (a)<br>(b)   | ct location of transmitting antenna  Give address, city/state or if no address, specify displayed to the specify tower location. Specify tower location to the specify tower location. Specify tower location to the specify tower location to the specify location to the specify tower location. Specify location to the specific location to the spe | STATION<br>mounted on<br>cify South | AND 4 KN element of Latitude and | M SOUTH EA<br>an AM array,<br>d East Longitu | ST OF CLA<br>specify coo | ARKSDALE, rdinates or cen |        |
| Latitu | de           | 34 ° 09 ' 22 "                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Long                                | tude                             | 90 °                                         | 37 ·                     | 52                        | •      |
| 7. (   | a)           | Elevation (to the nearest meter)  (1) of site above mean sea level;  (2) of the top of supporting structure above ground                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | d (includin                         | g antenna, a                     | ill other appur                              | tenances,                | 48<br>103                 | meters |
|        |              | and lighting, if any); and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |                                  |                                              |                          | 151                       |        |
| ,      |              | (3) of the top of supporting structure above mean                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | sea level [(                        | a)(1) + (a)(2                    | 2)].                                         |                          |                           | meters |
| (      |              | Height of radiation center: (to the nearest meter)  (1) above ground; and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |                                  |                                              |                          | 93                        | meters |
|        |              | <ul><li>(2) above mean sea level [(a)(1) + (b)(1)];</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     |                                  |                                              |                          | 141                       | meters |
| а      | Attac<br>bov | ch as an Exhibit sketch(es) of the supporting struct<br>e. If mounted on an AM directional array elemen<br>ers, as well as location of any FM radiator.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | _                                | -                                            | 1                        | Exhibit No. EXHIBIT 2     |        |

#### Section V-D -D TV BROADCAST ENGINEERING DATA (Page 3)

| 9.  | P. Antenna            |                                                                                                                                                                                                                                                                                                                                                                                                                              |                       |  |  |
|-----|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--|--|
|     | (a)                   | Manufacturer DIELECTRIC (b) Model No. TLP-24 A                                                                                                                                                                                                                                                                                                                                                                               |                       |  |  |
|     | (c)                   | Is a directional antenna proposed?                                                                                                                                                                                                                                                                                                                                                                                           | Yes No                |  |  |
|     |                       | If Yes, specify major lobe azimuth(s) degrees True and attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).                                                                                                                                                                                                                                                                                               | Exhibit No.           |  |  |
|     | (d)                   | Is electrical beam tilt proposed?                                                                                                                                                                                                                                                                                                                                                                                            | Yes No                |  |  |
|     |                       | If Yes, specify <u>0.50</u> degrees electrical beam tilt and attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).                                                                                                                                                                                                                                                                                         | Exhibit No. EXHIBIT 3 |  |  |
|     | (e)                   | Is mechanical beam tilt proposed?                                                                                                                                                                                                                                                                                                                                                                                            | Yes No                |  |  |
|     |                       | If Yes, specifydegrees mechanical beam tilt toward azimuthTrue and attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).                                                                                                                                                                                                                                                                                   | Exhibit No.           |  |  |
|     | (f)                   | The proposed antenna is: (check only one box)                                                                                                                                                                                                                                                                                                                                                                                |                       |  |  |
|     |                       | Horizontally polarized Circularly polarized Elliptically polarized Othe                                                                                                                                                                                                                                                                                                                                                      | r                     |  |  |
| 10. |                       | the antenna be mounted on an antenna structure which has been registered with the Commission, clude the proposed antenna installation?                                                                                                                                                                                                                                                                                       | Yes No                |  |  |
|     | If Y<br>15.           | es, provide the seven digit registration number and, unless item 11 also applies, proceed to item                                                                                                                                                                                                                                                                                                                            |                       |  |  |
| 11. |                       | the owner of the antenna structure filed an application for registration with the Commission that include the proposed facility?                                                                                                                                                                                                                                                                                             | Yes No                |  |  |
|     | If ye                 | s, provide the date FCC Form 854 was filed and proceed to item 15.                                                                                                                                                                                                                                                                                                                                                           | A                     |  |  |
| 12. | regis                 | opplicable) If the antenna structure is not yet registered but will be under the Commission's phased stration plan, has the FAA previously determined that the structure would not adversely affect y in air navigation?                                                                                                                                                                                                     | Yes No                |  |  |
|     | If Y                  | es, proceed to item 15.                                                                                                                                                                                                                                                                                                                                                                                                      |                       |  |  |
| 13. | by n<br>cong<br>struc | nna structure will be shielded by existing structures of a permanent and substantial character or atural terrain or topographic features of equal or greater height, and would be located in the tested area of a city, town or settlement where it is evident beyond all reasonable doubt that the ture is so shielded that it will not adversely affect safety in air navigation, and therefore does not ire registration. | Yes No                |  |  |
|     | If ye                 | s, submit as an Exhibit a detailed explanation and/or diagram to support your claim and skip to 15.                                                                                                                                                                                                                                                                                                                          | Exhibit No.           |  |  |

#### Section V-D -D TV BROADCAST ENGINEERING DATA (Page 4) 14. Antenna structure does not otherwise meet FAA Notification criteria as defined under 47 C.F.R. Section 17.7 and therefore does not require registration. If Yes, give reason below. Yes No 15. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? WAID(FM) BLH 940808KE If Yes, give call letter(s) or file number(s) or both. Yes V 16 Does the application propose to correct previous site coordinates? If Yes, list old coordinates. Latitude 0 Longitude o Exhibit No. 17. Attach as an Exhibit a topographic map that shows clearly, legibly, and accurately, the location of the **EXHIBIT 4** proposed transmitting antenna. This map must comply with the provisions of 47 C.F.R. Section 73.625(b). The map must further display clearly and legibly the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers. Exhibit No. 18. Attach as an Exhibit a map (Sectional Aeronautical Chart or equivalent) which shows clearly, **EXHIBIT 5** legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers: (a) the proposed transmitting location, and the radials along which profile graphs have been prepared; (b) the DTV coverage contour as established in 47 C.F.R. Section 73.625(b); and (c) the legal boundaries of the principal community to be served.

19. Terrain and coverage data (to be calculated in accordance with 47 C.F.R. Section 73.625(b))

Source of terrain data: (check only one box below)

|   | , , , , , , , , , , , , , , , , , , , ,  | ,        |                        |   |
|---|------------------------------------------|----------|------------------------|---|
|   | Linearly interpolated 30-second database | (Source: |                        | ) |
| V | Linearly interpolated 3-second database  | (Source: | DEFENSE MAPPING AGENCY | ) |
|   | 7.5 minute topographic map               |          |                        |   |
|   | Other (briefly summarize)                |          |                        |   |

#### Section V-D -D TV BROADCAST ENGINEERING DATA (Page 5)

| Radial bearing | Height of radiation center above average elevation of radial | Predicted distance to the DTV Coverage Contour |
|----------------|--------------------------------------------------------------|------------------------------------------------|
| (degrees True) | from 3 to 16 km (meters)                                     | (kilometers)                                   |
| *              |                                                              |                                                |
| 0              | 91                                                           | 51.9                                           |
| 45             | 93                                                           | 52.1                                           |
| 90             | 94                                                           | 52.1                                           |
| 135            | 94                                                           | 52.4                                           |
| 180            | 96                                                           | 52.5                                           |
| 225            | 94                                                           | 52.3                                           |
| 270            | 94                                                           | 52.3                                           |
| 315            | 92                                                           | 52.0                                           |

| 20. | Does the proposed facility satisfy the interference protection provisions of 47 C.F.R. Section 73.623(a)? (Applicable only if Certification Checklist items 1(a), (b), or (c) are answered "No.")                          | Yes No      |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|     | If No, attach as an Exhibit justification therefore, including a summary of any related previously granted waivers.                                                                                                        | Exhibit No. |
| 21. | If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefore. (Applicable only if <b>Certification Checklist</b> item 3 is answered "No.") | Exhibit No. |

22. Environmental Statement. (See 47 C.F.R. Section 1.1301 et seq.)

(a) If a Commission grant of this application comes within 47 C.F.R. Section 1.1307, such that it may have a significant environmental impact, submit as an Exhibit an Environmental Assessment required by 47 C.F.R. Section 1.1311.

Exhibit No.

(b) If No, explain briefly why not.

### THE PROPOSED CONSTRUCTION WOULD HAVE NO SIGNIFICANT IMPACT AS DEFINED IN SECTION 1.0137 OF THE FCC RULES \*

(c) Pursuant to OST Bulletin No. 65, the applicant must explain in an Exhibit what steps will be taken to limit the RF radiation exposure to the public and to persons authorized access to the tower site. In addition, where there are multiple contributors to radio frequency radiation, you must certify that the established RF radiation exposure procedures will be coordinated with all stations. \*

<sup>\*</sup> SEE ATTACHED ENGINEERING STATEMENT.

#### Section V-D -D TV BROADCAST ENGINEERING DATA (Page 6)

#### CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

| Name (Typed or Printed) RYAN WILHOUR | Relationship to Applicant (e.g., Consulting Engineer) CONSULTING ENGINEER                                         |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Signature / Lie / Saw                | Address (include ZIP Code) Kessler and Gehman associates, inc. 507 NW 60TH STREET, SUITE C, GAINESVILLE, FL 32607 |
| Date ( APRIL 18, 2000                | Telephone No. (include Area Code) 352-332-3157                                                                    |

ENGINEERING STATEMENT OF RYAN C. WILHOUR OF THE FIRM OF KESSLER AND GEHMAN ASSOCIATES, INC., CONSULTING ENGINEERS IN CONNECTION WITH AN APPLICATION FOR MISSISSIPPI AUTHORITY FOR EDUCATIONAL TELEVISION WHICH WOULD OPERATE ON DTV CHANNEL 26 WITH A MAXIMUM EFFECTIVE RADIATED POWER OF 10 KILOWATTS HORIZONTALLY POLARIZED AT AN EFFECTIVE ANTENNA HEIGHT OF 94 METERS ABOVE AVERAGE TERRAIN IN THE VICINITY OF CLARKSDALE, MISSISSIPPI

I, Ryan C. Wilhour, am an associate of Kessler and Gehman Associates, Inc. with offices in Gainesville, Florida. I am a graduate of the University of Florida with a Bachelor of Science Degree in electrical engineering.

This firm has been employed by Mississippi Authority for Educational Television (MAET) to make engineering studies and to prepare the engineering portion for construction permit for a new television broadcast station to operate on DTV channel 26 with a maximum effective radiated power of 10 kilowatt horizontally polarized at an effective antenna height of 94 meters above average terrain in the vicinity of Clarksdale, Mississippi.

MAET is the licensee of FCC File No. BPET-960919KK, a pending application that requests a waiver of the freeze imposed for new NTSC stations. Since the pending application was filed slightly after the freeze, a corresponding DTV station was not assigned for it in the DTV table of allotments proposed in the Sixth Report and Order.

#### **ATTACHED EXHIBITS**

In carrying out the engineering studies the following attached exhibits were prepared by me or under my supervision:

- 1. Proposed engineering specifications (Exhibit 1)
- 2. Elevation drawing of the antenna system (Exhibit 2)
- 3. Antenna Elevation Patterns (Exhibit 3)
- 4. USGS 7.5 minute topographic quadrangle showing the proposed transmitter location and coordinate lines (Exhibit 4)
- 5. Map showing the predicted DTV coverage contour (Exhibit 5)
- 6. Interference studies to other DTV and NTSC stations (Exhibit 6)

#### TRANSMITTER LOCATION

It is proposed to side mount the omni-directional antenna near the top of an existing tower upon which the antennas of WAID(FM) and WKDJ(FM) are presently side mounted. Since the overall height of the existing tower is not being changed it is not considered necessary to notify the FAA of the proposed construction.

#### ENVIRONMENTAL IMPACT / RFR HAZARD ANALYSIS

An analysis has been made of the human exposure to RFR using the calculation methodology described in *OET Bulletin 65, Edition, 97-01*. A conservative vertical plane relative field factor of 0.200 from the manufacturer's antenna pattern and a maximum average ERP of 10 kW was used to calculate the power density 2 meters above ground level in the immediate area surrounding the tower. The calculation was made using a frequency of 542 MHz, which is the lower edge of the proposed channel. To account for ground reflections, a coefficient of 1.6 was included in the calculation.

For the proposed channel, the maximum permissible exposure (MPE) limit for general population / uncontrolled exposure is 0.36 mW/cm². For the proposed channel, the MPE limit for occupational / controlled exposure is 1.81 mW/cm². At a reference point two meters AGL at the base of the supporting structure, the calculated power density is 0.002 mW/cm². This is 0.6% of the MPE limit for general population / uncontrolled exposure, and 0.1% of the MPE limit for occupational / controlled exposure.

Pursuant to *OET Bulletin 65* concerning multiple-user transmitter sites, only those licensees whose transmitters produce power density levels greater than 5.0% of the exposure limit are considered significant contributors to RFR. Since the proposed operation contributes 0.6% of the most restrictive permissible exposure at any location 2 meters above the ground, it is not considered a significant contributor to the RFR exposure. Thus, contributions to exposure from other RF sources in the vicinity of the proposed facility were not taken into account.

The proposed facility support structure is encompassed by a chain link fence, which restricts access from the general public. The applicant will cooperate with any other users of the tower by reducing the power to the antenna or if necessary completely cutting it off in order to protect maintenance workers on the tower.

## INTERFERENCE ANALYSIS AND PETITON FOR RULE MAKING TO AMEND THE DTV TABLE OF ALLOTMENTS

It is respectfully requested to amend the DTV table of allotments located in Table 1 of Appendix B in the Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order to include the proposed facility in the instant application.

Detailed spacing and interference studies confirm that the proposed facility may operate on channel 26 using a non-directional antenna with a maximum effective ERP of 10 kW at 94 meters above average terrain and comply with the 2% and 10% de *minimis* interference to the surrounding stations.

Exhibit 6A1 and 6A2 demonstrate the stations that do not meet the short spaced separation criteria. Of the stations listed, none are predicted to receive harmful interference from the parameters proposed herein. Thus, the parameters proposed herein are in compliance with the *de minimis* standard pursuant 47 C.F.R. §73.623(c) of the FCC rules.

The applicant accepts full responsibility for the elimination of any objectionable interference including that caused by intermodulation to facilities in existence or authorized prior to the grant of this application.

The foregoing statement and the report regarding the aforementioned engineering work are true and correct to the best of my knowledge. Executed on April 18, 2000.

KESSLER AND GEHMAN ASSOCIATES, INC.

Ryan Wilhour

Consulting Engineer

Year builbowe

#### CLARKSDALE, MISSISSIPPI

#### **ENGINEERING SPECIFICATIONS**

| A. | Transmitter Site (NAD 27)                                                                          |                                                                  |         |           |
|----|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------|-----------|
|    | ,                                                                                                  | North Latitude                                                   | 34° (   | 09 ' 22 " |
|    |                                                                                                    | West Longitude                                                   | 90 ° 3  | 37' 52"   |
|    | Street Address or Location                                                                         | O                                                                |         |           |
|    |                                                                                                    | N side of US61, 0.9 km<br>km SE of Clarksdale, Co<br>Mississippi |         |           |
| В. | Proposed Facility                                                                                  |                                                                  |         |           |
|    | DTV Channel                                                                                        |                                                                  |         |           |
|    |                                                                                                    | Number                                                           | 26      |           |
|    |                                                                                                    | Frequency                                                        | 542-548 | MHz       |
| C. | Antenna Height                                                                                     | - '                                                              |         |           |
|    | Height of Site Above Mean Sea Level (AMSL)                                                         |                                                                  | 48      | m         |
|    | Overall Height of Structure A                                                                      |                                                                  | 103     | m         |
|    | (including all appurtenances)                                                                      |                                                                  |         |           |
|    | Overall Height of Structure A                                                                      |                                                                  | 151     | m         |
|    | (including all appurtenan                                                                          | 7                                                                |         |           |
|    | Height of Site Above Average Terrain                                                               |                                                                  | l<br>93 | m         |
|    | Effective Height of Antenna Above Ground                                                           |                                                                  | 93      | m         |
|    | Effective Height of Antenna Above Average Terrain Effective Height of Antenna Above Mean Sea Level |                                                                  | 141     | m         |
|    | Enective Fleight of Antenna A                                                                      | Above Mean Sea Level                                             | 171     | 111       |
| D. | Antenna Parameters – Horizo                                                                        | ontal Polarization                                               |         |           |
|    | Maximum Antenna Gain in Beam Maximum                                                               |                                                                  | 13.62   | dB        |
|    | Maximum Antenna Gain in Horizontal Plane                                                           |                                                                  | 12.79   | dB        |
|    | Maximum Effective Radiated Power                                                                   |                                                                  | 10.00   | dBk       |
|    | In Beam Maximum                                                                                    |                                                                  | 10.00   |           |
|    | Maximum Effective Radiated Power                                                                   |                                                                  | 9.17    |           |
|    | In Horizontal Plane                                                                                | 8.26                                                             | kW      |           |



MISSISSIPPI AUTHORITY FOR EDUCATIONAL TELEVISION CLARKSDALE, MISSISSIPPI

2K0418

EXHIBIT 1

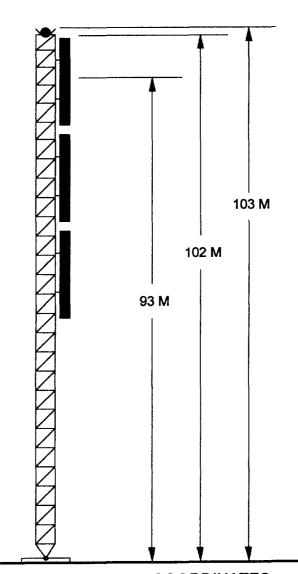
#### **ELEVATION VIEW**

PROPOSED DIELECTRIC TLP-24 A ANTENNA

WXISTING WAID(FM) ANTENNA

EXISTING WKDJ(FM) ANTENNA

GUYED TOWER AND ANTENNA TO BE LIGHTED AND PAINTED IN ACCORDANCE WITH FCC REQUIREMENTS FAA # 94-ASO-1169-OE



SITE ELEVATION: 48 M AMSL

OVERALL HEIGHT AGL:

103 M

OVERALL HEIGHT AMSL:

151 M

RADIATION CENTER AGL: RADIATION CENTER AMSL:

93 M

141 M

**COORDINATES:** 

N. LATITUDE

34° 09' 22"

W. LONGITUDE 90° 37' 52"

**NOTE: NOT TO SCALE** 

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507 N.W. 60th Street, Suite 9

Gainesville, Florida 32607

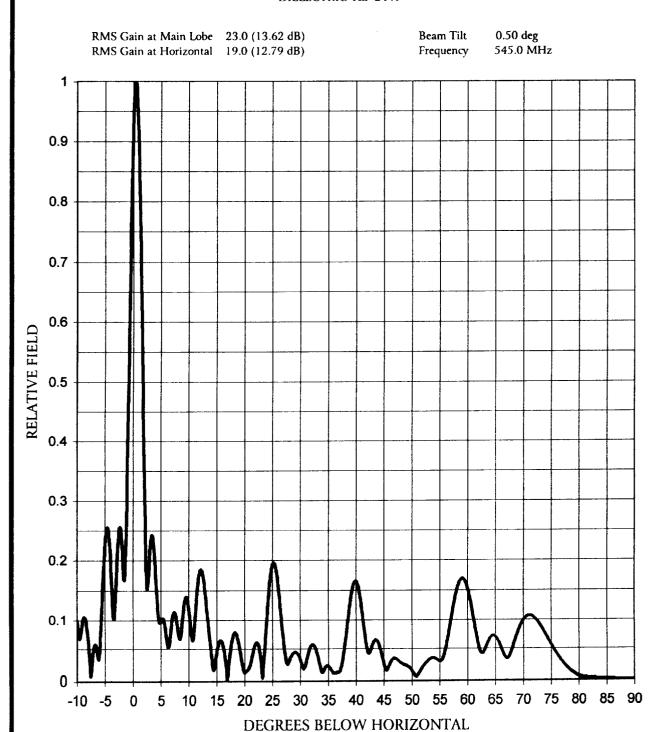
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**EXHIBIT 2** 

#### **ELEVATION PATTERN**

#### DIELECTRIC TLP-24 A



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Gaine with Florids 39607

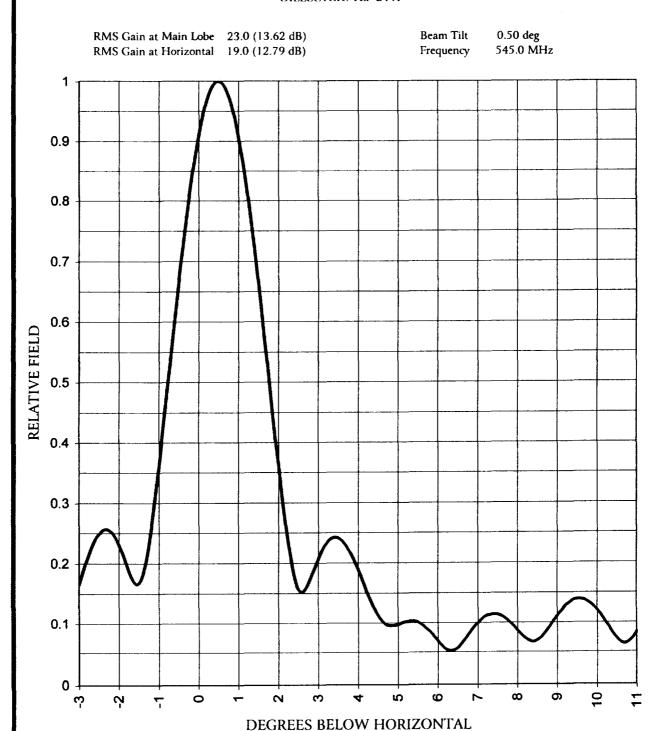
MISSISSIPPI AUTHORITY FOR EDUCATIONAL TELEVISION CLARKSDALE, MISSISSIPPI

2K0418

**EXHIBIT 3A** 

#### **ELEVATION PATTERN**

#### DIELECTRIC TLP-24 A



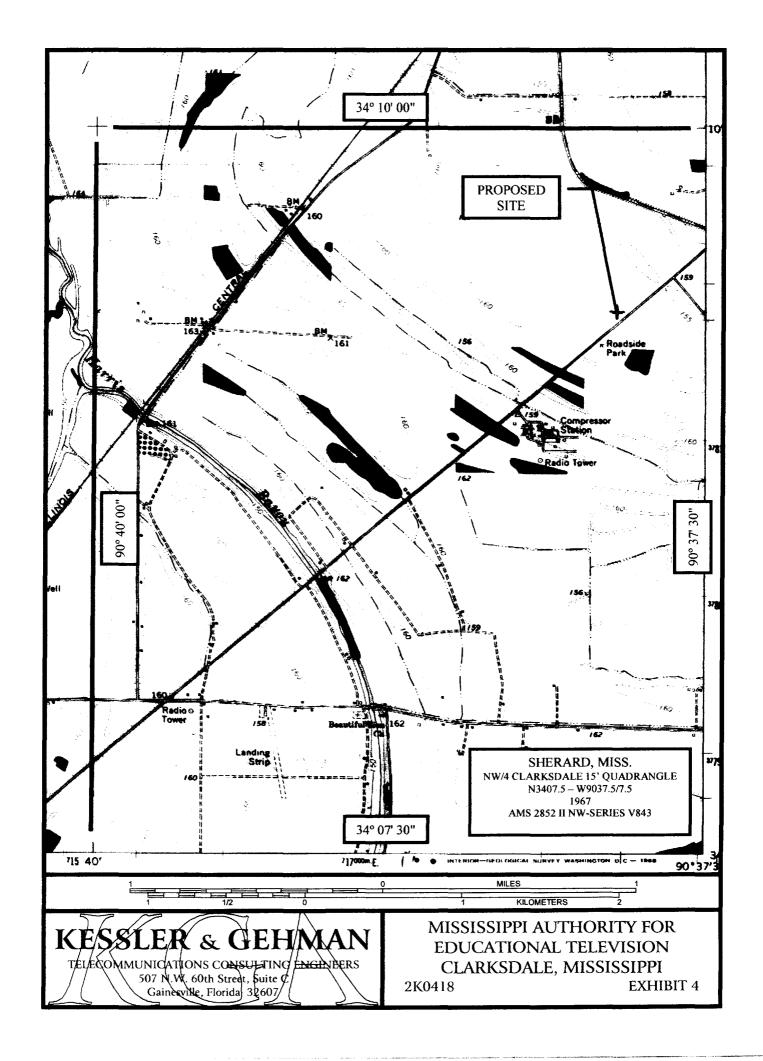
KESSLER & CEHMAN
TELECOMMUNICATIONS CONSULTING ENGINEERS
507 N.W. 60th Street, Suite

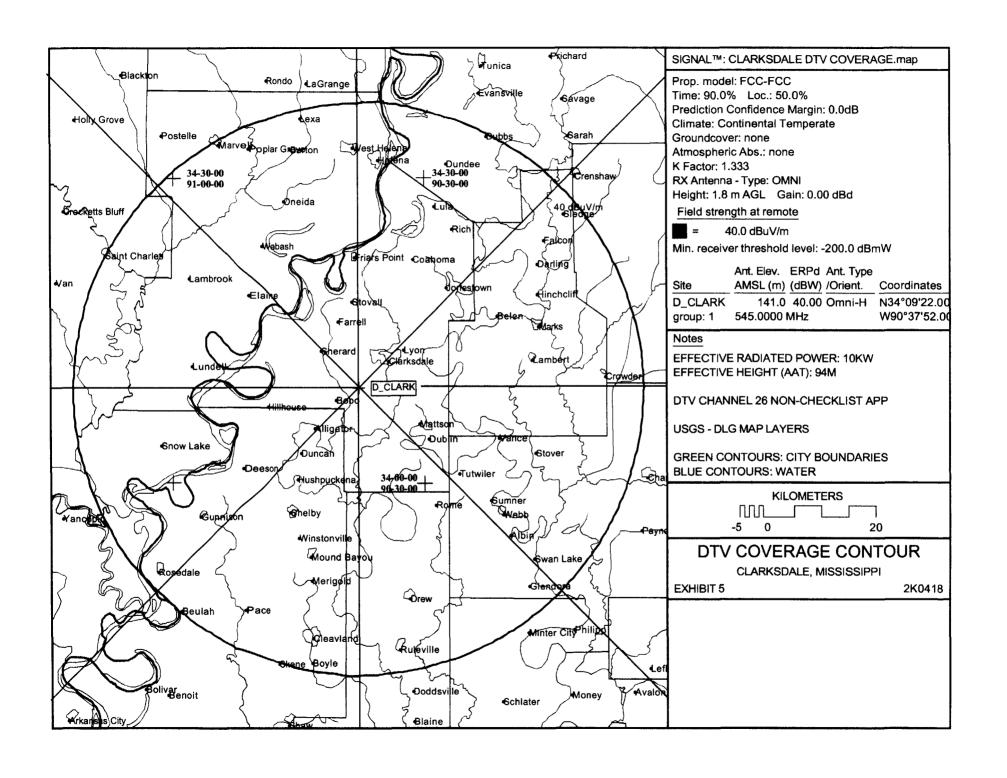
Gainesville Florida 32602

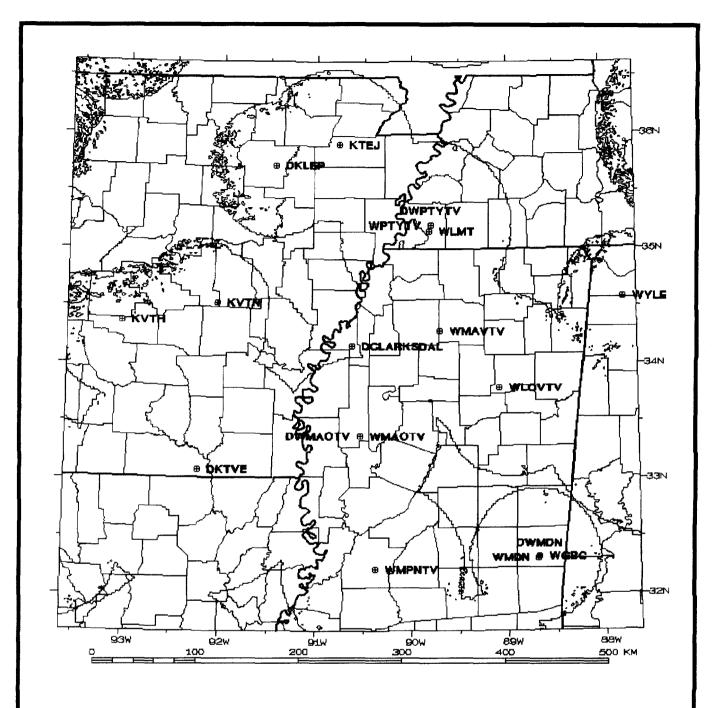
MISSISSIPPI AUTHORITY FOR EDUCATIONAL TELEVISION CLARKSDALE, MISSISSIPPI

2K0418

**EXHIBIT 3B** 







No Interference
Area: 213070 sq km
Population: 4763000.
Households: 1732000.

Interference

Area: 0. sq km Population: 0. Households: 0. Signal below minimum Area: 90470. sq km Population: 1235000, Households; 470000.

KESSLER & GEHMAN

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MISSISSIPPI AUTHORITY FOR
EDUCATIONAL TELEFISION
CLARKSDALE, MISSISSIPPI
Apr1800A EXHIBIT 6A1

```
St: MS Ch.: 18 km: 86.3 bear: 79.8
                 Type: NTSC City: OXFORD
Name: WMAVTV
                 Type: NTSC City: GREENWOOD St: MS Ch.: 23 km: 87.1 bear:174.6
Name: WMAOTV
                                             St: TN Ch.: 30 km:133.4 bear: 33.5
Name: WLMT
                 Type: NTSC City: MEMPHIS
                 Type: NTSC City: PINE BLUFF St: AR Ch.: 25 km:136.3 bear:288.2
Name: KVTN
                                             St: TN Ch.: 24 km:138.7 bear: 32.8
Name: WPTYTV
                 Type: NTSC City: MEMPHIS
                 Type: NTSC City: WEST POINT St: MS Ch.: 27 km:147.8 bear:105.3
Name: WLOVTV
                 Type: NTSC City: JONESBORO St: AR Ch.: 19 km:194.7 bear:356.3
Name: KTEJ
                 Type: NTSC City: JACKSON
                                             St: MS Ch.: 29 km:217.2 bear:173.8
Name: WMPNTV
                 Type: NTSC City: HOT SPRING St: AR Ch.: 26 km:223.1 bear:276.9
Name: KVTH
                                             St: AL Ch.: 26 km:265.5 bear: 79.0
                 Type: NTSC City: FLORENCE
Name: WYLE
                 Type: NTSC City: MERIDIAN
                                             St: MS Ch.: 30 km:272.1 bear:137.8
Name: WGBC
                                             St: MS Ch.: 24 km:272.9 bear:138.1
                 Type: NTSC City: MERIDIAN
Name: WMDN
                 Type: NTSC City: TUSCALOOSA St: AL Ch.: 33 km:304.9 bear:103.4
Name: WCFTTV
                 Type: NTSC City: HATTIESBUR St: MS Ch.: 22 km:332.3 bear:156.5
Name: WHLT
                 Type: NTSC City: ALEXANDRIA St: LA Ch.: 25 km:338.9 bear:212.4
Name: KLPATV
                 Type: NTSC City: SHREVEPORT St: LA Ch.: 24 km:347.0 bear:242.7
Name: KLTSTV
                 Type: NTSC City: SHREVEPORT St: LA Ch.: 33 km:348.2 bear:242.5
Name: KMSSTV
                 Type: NTSC City: FORT SMITH St: AR Ch.: 24 km:363.2 bear:299.4
Name: KPOMTV
                                             St: KY Ch.: 29 km:371.4 bear: 27.9
                 Type: NTSC City: PADUCAH
Name: WKPD
                 Type: NTSC City: CAPE GIRAR St: MO Ch.: 23 km:373.9 bear: 14.6
Name: KBSI
                 Type: NTSC City: FAYETTEVIL St: AR Ch.: 29 km:375.8 bear:304.3
Name: KHOGTV
                 Type: NTSC City: HUNTSVILLE St: AL Ch.: 19 km:381.2 bear: 79.1
Name: WHNTTV
                 Type: NTSC City: HUNTSVILLE St: AL Ch.: 25 km:381.4 bear: 79.1
Name: WHIO
                 Type: NTSC City: SPRINGFIEL St: MO Ch.: 27 km:396.5 bear:329.0
Name: KDEBTV
                 Type: NTSC City: SPRINGFIEL St: MO Ch.: 33 km:399.5 bear:329.1
Name: KSPR
                                             St: IL Ch.: 27 km:404.8 bear: 20.5
Name: WTCT
                 Type: NTSC City: MARION
                                             St: MS Ch.: 25 km:406.6 bear:158.3
                 Type: NTSC City: GULFPORT
Name: WXXVTV
                                             St: MS Ch.: 19 km:409.8 bear:156.9
Name: WMAHTV
                 Type: NTSC City: BILOXI
                 Type: NTSC City: NASHVILLE St: TN Ch.: 30 km:419.8 bear: 55.0
Name: WUXP
                 Type: NTSC City: BATON ROUG St: LA Ch.: 27 km:423.9 bear:187.5
Name: WLPBTV
                 Type: HDTV City: GREENWOOD St: MS Ch.: 25 km: 87.1 bear:174.6
Name: DWMAOTV
                                             St: TN Ch.: 25 km:138.7 bear: 32.8
                 Type: HDTV City: MEMPHIS
Name: DWPTYTV
                                             St: AR Ch.: 27 km:189.3 bear:337.2
                 Type: HDTV City: NEWARK
Name: DKLEP
                 Type: HDTV City: EL DORADO St: AR Ch.: 27 km:190.3 bear:231.4
Name: DKTVE
                                             St: MS Ch.: 26 km:272.9 bear:138.1
Name: DWMDN
                 Type: HDTV City: MERIDIAN
                 Type: HDTV City: ALEXANDRIA St: LA Ch.: 26 km:338.9 bear:212.4
Name: DKLPATV
                 Type: HDTV City: SHREVEPORT St: LA Ch.: 25 km:347.0 bear:242.7
Name: DKLTSTV
                 Type: HDTV City: FORT SMITH St: AR Ch.: 27 km:363.2 bear:299.4
Name: DKPOMTV
                                             St: AL Ch.: 26 km:387.3 bear: 94.4
                 Type: HDTV City: GADSDEN
Name: DWTJP
                                             St: TN Ch.: 27 km:404.5 bear: 57.6
                 Type: HDTV City: NASHVILLE
Name: DWKRN-DTC
                 Type: HDTV City: BATON ROUG St: LA Ch.: 25 km:423.9 bear:187.5
Name: DWLPBTV
Stations that are actually interfered with.
                                              Population (1990)
                NTSC Int
                               HDTV Int
Name
None
```

No Interference Signal below minimum Interference Area: 213070. sq km 0. sq km Area: 90470. sq km Area: Population: 4763000. 0. 1235000. Population: Population: Households: 1732000. 0. 470000. Households: Households:



MISSISSIPPI AUTHORITY FOR EDUCATIONAL TELEFISION CLARKSDALE, MISSISSIPPI

Apr1800A

**EXHIBIT 6A2**